

# **Technical data sheet**

**KR24** 

# Rotary actuator for ball valves

- Nominal torque 2 Nm
- Nominal voltage AC/DC 24 V
- Control Open-close, 3-point
- · kv setting (angle of rotation limiting)



# Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
	Power consumption in operation	0.5 W
	Power consumption in rest position	0.2 W
	Power consumption for wire sizing	1 VA
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	Min. 2 Nm
	Manual override	Gear disengagement with magnet
	Running time motor	75 s / 90°
	Sound power level motor max.	35 dB(A)
	Position indication	Mechanically, pluggable
	Kvs setting	Angle of rotation limitation starting with 90° (A
		- AB = 100%) in 2.5° steps (Scale: 25100%
		of kvs)
Safety	Protection class IEC/EN	III Safety extra-low voltage
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/EC
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Certification UL	cULus according to UL 60730-1A, UL 60730-2-
		14 and CAN/CSA E60730-1:02
	Mode of operation	Туре 1
	Rated impulse voltage supply / control	0.8 kV
	Control pollution degree	3
	Ambient temperature	-3050°C
	Non-operating temperature	-4080°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Weight	Weight approx.	0.22 kg

#### Safety notes



• This device has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.

- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.



Product features	
Direct mounting	Simple direct mounting on the ball valve with only one screw. The mounting orientation in relation to the ball valve can be selected in $90^\circ$ increments.
Manual override	Manual override with magnet possible (gear disengagement as long as the magnet adheres to the magnet symbol). The Z-MA magnet for the gear disengagement is enclosed.
High functional reliability	The actuator is overload protected, requires no limit switches in intermediate positions and automatically stops when the end stop is reached (at rest).
Adjustable angle of rotation	The rotary actuator can be adjusted beginning with $90^{\circ}$ (A – AB = 100%) in 2.5° increments. The scale corresponds to 25100% of the kvs value.

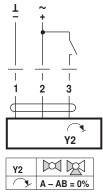
# Accessories

	Description	Туре		
Mechanical accessories	Magnet disengagement, bulk-packaged with 20 pcs.	Z-MA		
Electrical installation				

# Notes • Connection via safety isolating transformer. • Parallel connection of other actuators possible. Observe the performance data.

#### Wiring diagrams

# AC/DC 24 V, open-close



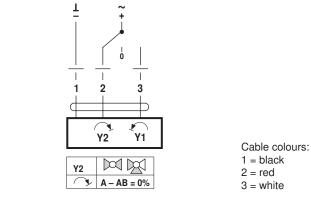
# Cable colours:

1 = black

3 = white

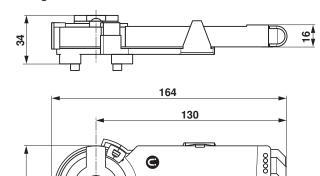
2 = red

# AC/DC 24 V, 3-point



# **Dimensions** [mm]

#### **Dimensional drawings**



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# **Further documentation**

- Overview Valve-actuator combinations
- Data sheets for ball valves
- · Installation instructions for actuators and/or ball valves
- General notes for project planning